

2002B148-2 US
OA dated 15 Jun 2006
Response dated 16 Oct 22006

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REMARKS

This reply is in response to the Office Action mailed June 15, 2006. Claims 1-22 are pending in the application. Claims 1-17 stand rejected and claims 18-22 have been withdrawn from consideration by the Examiner. Applicant confirms election of Group I (claims 1-17) for prosecution on the merits, and has amended the claims and Abstract for reasons set forth below. Applicant has also amended claim 1 to more clearly recite aspects of the invention. No new matter has been added to claim 1 and support for this amendment can be found at least in the examples and the original claims. Entry of the foregoing amendment and reconsideration of the claims is respectfully requested.

Claims 1-22 stand restricted under 35 U.S.C. § 121 as follows:

- Group I (claims 1-17): drawn to a catalyst precursor, classified in class 502, subclass 167;
- Group II (claims 18-20 and 22): drawn to a catalyst, classified in class 502, subclass 103; and
- Group III (claim 21): drawn to a method of polymerizing olefins, classified in class 526, subclass various depending on the cocatalyst.

Applicant confirms the election of Group I (claims 1-17), and respectfully traverses the restriction on grounds that each claim (claims 1-22) includes all the limitations of base claim 1. Therefore, claim 1 is a linking claim and there is no additional burden on the Examiner to examine all claims 1-22. Withdrawal of the restriction is respectfully requested.

Claims 1-5 and 8-17 stand rejected under 35 U.S.C. § 112, first paragraph. The Examiner states that the specification, while being enabling for the transition metal of the catalyst compound being from groups 8 or 9, does not reasonably provide enablement for the transition metal being from group 4-7, 10 or 11.

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Applicant respectfully traverses the rejection. The specification is more than enabling for the transition metal being from group 4-7, 10 or 11. The specification describes and enables a structure having a metal in a +2 oxidation state. Any metal from Groups 4-11 can have a +2 oxidation state. Therefore, the specification is enabling to one of ordinary skill in the art. Withdrawal of the rejection and allowance of the claims is respectfully requested.

Claims 1, 3-6, 8-10, 13 and 15 are objected to because of the informalities noted by the Examiner at paragraph 9 of the Office Action. Applicant has amended those claims to correct the informalities noted by the Examiner, obviating the objection. Those amendments are not presented to distinguish a reference, and are not intended to narrow the claims or otherwise limit the scope of equivalents thereof. Therefore, the claims as amended are entitled to a full range of equivalents if not previously amended to distinguish a reference. Withdrawal of the objection is respectfully requested.

Claims 1-17 stand rejected under 35 U.S.C. § 112, second paragraph. Applicant has amended claims 1, 3, 5, 11 and 15-17 to correct the matters of form and to correct the grammatical/typographic errors noted by the Examiner, obviating the rejection. Those amendments are not presented to distinguish a reference, and are not intended to narrow the claims or otherwise limit the scope of equivalents thereof. Therefore, the claims as amended are entitled to a full range of equivalents if not previously amended to distinguish a reference. Withdrawal of the rejection and allowance of the claims is respectfully requested.

Claims 1-8 and 10-17 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Liu (CN Patent No. 1306012A; hereafter "Liu"), and claims 1-17 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Liu.

Applicant respectfully traverses the rejections. Liu discloses a nonmetallocene catalyst composition formed from a tridentate nitrogen neutral ligand and metal M having a substituent group R attached to the phenyl ring. See, Liu at page 2. R is selected from H, Me, i-Pr, and t-Bu.

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Id. Liu does not teach, show or suggest independently selecting R from H, Me, i-Pr, and t-Bu. Liu also does not teach, show or suggest more than one R group on the phenyl rings except for the examples having dimethyl groups or di-isopropyl groups at the 2 and 6 positions. Id. at Examples 12-14. Therefore, Liu does not teach, show or suggest a catalyst precursor compound as represented in claim 1 having independent R, R', R'', R''', R^{P1} and R^{P2} substituent groups as required in claim 1 and those dependent therefrom. Liu also does not teach, show or suggest a catalyst precursor compound as represented in claim 1 having independent R's at the 2, 6 positions; independent R's at the 3 position; and independent R^{P1}s and R^{P2}s at the 4 position of a phenyl ring, as required in claim 1 and those dependent therefrom. For at least those reasons, withdrawal of the rejection and allowance of the claims is respectfully requested.

Furthermore, Liu does not teach, show or suggest an allyl substituent group as required as required in claim 1 as amended and those dependent therefrom. Liu only describes and enables one or two vinyl groups on the phenyl rings. See, examples. Therefore, Liu does not teach, show, or suggest a catalyst precursor compound, as represented in claim 1, where at least one of R', R'', R''', R^{P1} and R^{P2} is an allyl, as required in claim 1 as amended and those dependent therefrom. Moreover, Liu does not teach, show or suggest a catalyst precursor compound as represented in claim 1 where at least one of R^{P1}, R^{P2}, and R''' can be polymerized by a free radical initiator, as required in claim 1 and those dependent therefrom. Withdrawal of the rejection and allowance of the claims is respectfully requested.

The secondary reference made of record is noted. However, it is believed that the secondary references are no more pertinent to the Applicant's disclosure than the primary references cited in the Office Action. Therefore, Applicant believes that a detailed discussion of the secondary references is not necessary for a full and complete response to this Office Action.

Having addressed all issues set out in the office action, Applicant respectfully submits that the pending claims are now in condition for allowance. Applicant invites the Examiner to telephone the undersigned attorney if there are any issues outstanding which have not been

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addressed to the Examiner's satisfaction. A petition for extension of time for filing this response is attached; however, in the event that petition becomes separated from this Response, the Commissioner is hereby authorized to charge counsel's Deposit Account No. 05-1712, for any fees, including extension of time fees and excess claim fees, required to make this response timely and acceptable to the Office.

Oct 16, 2006
Date

Respectfully submitted,

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